Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application:

Listing of Claims:

1-21. (Cancelled).

22. (New) A method for providing exercise therapy to an individual comprising:

testing the individual's physiological condition; and then

prescribing an exercise regimen for therapy, wherein said testing comprises:

subjecting the individual to an exercise session in which the individual performs a plurality of exercise cycles;

electronically monitoring a heart rate of said individual during the exercise session;

recording a time trace of said heart rate to an electronic file; and

analyzing said electronic file, wherein said analyzing comprises:

determining cycle parameters; and

assigning a value to a heart wave index indicative of said condition based on said cycle parameters.

23. (New) The method of claim 22 wherein said determining cycle parameters comprises determining a maximum heart rate, and said assigning comprises assigning to said heart wave index a value based on said maximum heart rate.

24. (New) The method of claim 22 wherein said recording comprises, for said at least one of said

plurality of exercise cycles, recording at least one portion selected from a group consisting of a rising portion, a top portion into which said rising portion transitions, and a falling portion into which said top portion transitions, wherein said rising portion corresponds to a stress part of said at least one exercise cycle, and said falling portion corresponds to a relaxation part of said at least one exercise cycle.

25. (New) The method of claim 24 wherein said determining comprises determining at least one parameter selected from a group consisting of an upward slope within said rising portion, a downward slope within said falling portion, a minimum heart rate within said falling portion, and a peak heart rate within said top portion, and wherein said assigning comprises assigning to said heart wave index a value based on said at least one parameter.

26. (New) The method of claim 25 wherein said assigning comprises assigning to said heart wave index a weighted sum of at least two of said upward slope, said downward slope, said minimum heart rate, and said peak heart rate.

27. (New) The method of claim 26 wherein said assigning comprises summing at least said upward slope, said downward slope, said minimum heart rate, and said peak heart rate.

28. (New) The method of claim 25 wherein said determining further comprises statistically fitting a first parabola through said top portion to create a fit, said fit characterized by at least one goodness of fit parameter, and wherein said assigning comprises assigning to said heart wave index a value based on at least one parameter selected from a group consisting of said upward slope, said

downward slope, said minimum heart rate, said peak heart rate, and said goodness of fit parameter.

29. (New) The method of claim 28 further comprising diagnosing abnormal physiological conditions by comparing said at least one goodness of fit parameter with a catalogue, said catalogue relating said goodness of fit parameter to said physiological conditions.

30. (New) The method of claim 29 wherein said comparing comprises accessing said catalogue through an electronic network, wherein said electronic network is selected from a group consisting of a local area network, a wireless network, a wired network, a wide area network, the Internet, and any combination thereof.

31. (New) The method of claim 25 wherein said recording further comprises recording at least one rest portion selected from a group consisting of a pre-exercise rest portion, an intervening rest portion corresponding to a period from an end of said at least one exercise cycle to a beginning of a next exercise cycle, and a post-exercise rest portion.

32. (New) The method of claim 31 wherein said determining further comprises determining a resting heart rate within said at least one rest portion, and wherein said assigning comprises assigning a value based on at least one parameter selected from a group consisting of said upward slope, said downward slope, said minimum heart rate, said peak heart rate, and said rest heart rate.

33. (New) The method of claim 22 wherein said determining further comprises determining a base line slope and wherein said assigning comprises assigning a value based on at least one parameter selected from a group

consisting of said upward slope, said downward slope, said minimum heart rate, said peak heart rate, said resting heart rate, and said base line slope.

34. (New) The method of claim 33 wherein said determining further comprises statistically fitting a second parabola through said at least one rest portion to create a fit, said fit characterized by at least a second goodness of fit parameter, and wherein said assigning comprises assigning to said heart wave index a value based on at least one parameter selected from a group consisting of said upward slope, said downward slope, said minimum heart rate, said peak heart rate, said set of goodness of fit parameters, said resting heart rate, said base line slope, and said second goodness of fit parameter.

35. (New) The method of claim 34 further comprising diagnosing abnormal physiological conditions by comparing said second goodness of fit parameter with a catalogue, said catalogue relating said second goodness of fit parameter to said abnormal physiological conditions.

36. (New) The method of claim 22 further used for modifying an exercise regimen for said individual, wherein said regimen has a target capacity index and a target heart rate for said at least one exercise cycle, said method further comprising:

comparing said heart wave index to said target capacity index; and

changing said target heart rate and said target capacity index in response to said comparing.

37. (New) The method of claim 36 further comprising providing said heart wave index through an electronic network, wherein said electronic network is selected from a group consisting of a local area network, a

wireless network, a wired network, a wide area network, the Internet, and any combination thereof.

38. (New) The method of claim 36 further comprising providing said exercise regimen through an electronic network, wherein said electronic network is selected from a group consisting of a local area network, a wireless network, a wired network, a wide area network, the Internet, and any combination thereof.

39. (New) The method of claim 36 wherein said changing comprises changing said target heart rate in proportion to a difference between said target capacity index and said heart wave index.

40. (New) The method of claim 22 further comprising transmitting heart rate data from a monitoring location to a recording location through an electronic network, wherein said electronic network is selected from a group consisting of a local area network, a wireless network, a wired network, a wide area network, the Internet, and any combination thereof.

41. (New) The method of claim 22 further comprising transmitting said electronic file through an electronic network to an analyzing location, wherein said electronic network is selected from a group consisting of a local area network, a wireless network, a wired network, a wide area network, the Internet, and any combination thereof.

42. (New) A system for assessing an individual's physiological condition during said individual's performance of an exercise regimen, wherein said regimen comprises at least one exercise session and wherein said session comprises a plurality of exercise

cycles, said system comprising:

an electronic monitor that monitors a heart rate of said individual during at least one of said sessions;

a recorder for recording a time trace of said heart rate to an electronic file; and

an analyzer that fits a parabola through at least a portion of said recorded time trace using regression analysis, characterizes said fit by a set of goodness of fit parameters, and assigns a value to a heart wave index indicative of said condition based on said set of goodness of fit parameters.

43. (New) The system of claim 42 wherein said portion is selected from a group consisting of a rising portion of an exercise cycle, a top portion into which said rising portion transitions, and a falling portion into which said top portion transitions, a pre-exercise rest portion, an intervening rest portion corresponding to a period from an end of one exercise cycle to a beginning of the next exercise cycle, a post-exercise rest portion and combinations thereof.

44. (New) The system of claim 42 wherein said analyzer additionally determines at least one parameter selected from a group consisting of a maximum heart rate, an upward slope within said rising portion, a downward slope within said falling portion, a minimum heart rate within said falling portion, a peak heart rate within said top portion, a resting heart rate, and a base line slope.

45. (New) The system of claim 42 wherein said analyzer further comprises routines for diagnosing abnormal physiological conditions by comparing said set of goodness of fit parameters with a catalog, said catalog relating said goodness of fit parameters to said physiological

conditions.

46. (New) The system of claim 42 wherein said analyzer assigns to said heart wave index a value based on at least one parameter selected a group consisting of an upward slope, a downward slope, a minimum heart rate, a peak heart rate, a resting heart rate, a base line slope, and a set of goodness of fit parameters.

47. (New) The system of claim 42 further used for modifying an exercise course for said individual, said course having a target heart wave index and comprising at least one exercise session that comprises at least one exercise cycle having a target heart rate, wherein said analyzer compares said heart wave index to said target heart wave index and changes said target heart rate and said target heart wave index in response to said comparison.

48. (New) The system of claim 42 further used for determining a capacity index, wherein said individual undergoes an exercise test, said test comprising a plurality of test cycles, wherein said plurality of test cycles comprises a maximum effort cycle during which said individual exercises to said individual's maximum physical capability, and wherein said electronic monitor monitors a heart rate of said individual during said test and said analyzer (1) determines at least one cycle parameter; and (2) assigns to said capacity index a value based on said at least one of said cycle parameter.

49. (New) The system of claim 48 wherein said at least one cycle parameter is selected from the group consisting of a first peak heart rate corresponding to a maximum heart rate monitored during said maximum effort cycle, a second peak heart rate corresponding to a maximum

heart rate monitored during another of said plurality of test cycles that is not said maximum effort cycle, an upward slope of said heart rate monitored during a part of a stress portion of at least one of said plurality of test cycles, and a downward slope of said heart rate monitored during a part of a relaxation portion of the at least one of said plurality of test cycles.

50. (New) The system of claim 48 wherein said at least one cycle parameter is selected from a group consisting of a peak heart rate, an upward slope, and a downward slope.

51. (New) The system of claim 48 further used for prescribing an exercise course for a person, wherein said analyzer is programmed to: (1) receive a metric indicative of said person's physiological condition and (2) generate said exercise regimen using an algorithm that relates said heart wave index to said regimen; and wherein said system further comprises:

an output device that provides said individual with said exercise course.

52. (New) The system of claim 51 wherein said algorithm uses a look-up table.

53. (New) The system of claim 42 wherein said analyzer generates an exercise regimen that comprises a plurality of exercise sessions comprising:

at least one warm up cycle; and

at least one critical cycle that has a target heart rate based on said heart wave index.

54. (New) The system of claim 42 wherein said analyzer synchronizes said regimen with at least one cyclic phenomena selected from a group consisting of a lunar cycle

and a circadian rhythm of said individual.

55. (New) The system of claim 42 wherein said analyzer generates an instruction set that provides directions to said individual on how to exercise.

56. (New) The system of claim 42 further comprising a communication link between said recorder and said analyzer, wherein said link comprises an electronic network selected from a group consisting of a local area network, a wireless network, a wired network, a wide area network, an Internet connection, and any combination thereof.

57. (New) The system of claim 56 further comprising a user interface selected from a group consisting of an Internet web page, a display monitor, a computer terminal, an audio device, a tactile device, or any combination thereof.